REMARKS

In the Office Action dated September 8, 2003, claims 1-16 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. One basis for this rejection was the inadvertent, continued use of the term "new expert rule" in some of the claims. As the Examiner noted, this was an oversight and the term "modified expert rule" should have been used at all locations in all of the claims. Claims 11 and 12 have been amended to correct this oversight, and in new claims 17 and 18 submitted herewith, the term "modified expert rule" is used at all locations.

A further basis for the rejection under §112, second paragraph was because the Examiner stated it is unclear what the term "expert" is intended to limit in the claim. This rejection is respectfully traversed for the following reasons.

As argued in Applicants' previous response, the term "expert system" is a term well known to those of ordinary skill in the art (alternatively being referred to as an artificial intelligence system, or a neural network). In all systems of this type, the system begins with a set of rules (in the case of an expert system, these rules are "expert rules"). As more data are supplied to the system the rules themselves can be changed or modified, this being referred to as "training" the system. This is all that the terms "expert system" and "expert rule" in the claims are intended to convey. It is easy to determine when one expert rule, when employed in the expert system, produces a diagnostic result that is improved compared to a previous diagnostic result. The "improvement" can be simply that the new diagnostic result is more precise than the previous diagnostic result, which is easy to ascertain, or the new diagnostic result may be correct whereas the previous diagnostic result was not correct, which is also easy to ascertain.

As noted in Applicants' previous response, a number of the references made of record by the Examiner describe expert systems, artificial intelligence systems and/or neural networks, any of which is an example of the type of system employable as the "expert system" in the claims of the present application. The Information Disclosure Statement filed by Certificate of Mailing on November 18, 2003, identified several more references that disclose further suitable examples of systems that can be employed as the "expert system" in the present claims. Therefore, not only does the prior art abound with appropriate examples of such expert systems, but also the level of detail of the disclosure in those references is comparable to the level of detail in the present disclosure, thereby providing further evidence that those of ordinary skill in the art are well informed as to the manner of operation of systems of this type.

The method and system disclosed and claimed in the present application, departing from the teachings of these prior art references, including the Anderson et al. and Mendoza et al. references relied upon by the Examiner as the basis for rejecting then-pending claims 1 and 9 under 35 U.S.C. §103(a), by providing for the economic gathering of multiple marker biochip data together with validated patient information, the validated patient information being in the form of follow-up diagnostic data. In the system and method now set forth in independent claims 17 and 18, this is accomplished by collecting data from multiple measurements of biochips at multiple distributed point of care device sites, and by collecting related follow-up diagnostic data with respect to each biochip measurement from multiple, different electronic patient records. All of this information (biochip data and patient data) are aggregated at a central server, and the aggregated data are then used to train the

expert system by producing a modified expert rule that has improved diagnostic value compared to a previously-employed expert rule.
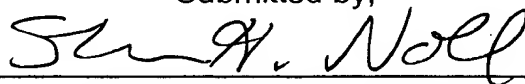
The Anderson et al. reference, and many of the other references of record, disclose a decision support system (which may be an expert system) that automatically generates a diagnosis from biochip data, and which can optionally be augmented by electronic patient record data. The evaluation of the biochip point of care data using the expert system may be done optionally by accessing the expert system via data networks, such as the Internet. This merely describes the end result or end goal of the use of the expert system in the context of making a diagnosis from biochip data, but provides no teaching or information whatsoever regarding how the biochip data are collected, nor is any teaching provided regarding how the collected data are employed to generate a modified expert rule (or even if the collected data are used for that purpose). There is no teaching or suggestion for the networked entry of data into the expert system in the Anderson et al. reference. Merely because the system can be accessible via the Internet in order to use it and/or to find a result that the system produced at a previous time, does not induce or motivate a person of ordinary skill in the art to produce a system or a method wherein the raw data are entered in a networked fashion, as set forth in the claims of the present application.

The Examiner relied on the Mendoza et al. reference as describing a "new generation biochip." Even if the "new generation biochip" disclosed in the Mendoza et al. reference were used to generate data that were then entered into the expert system disclosed in the Anderson et al. reference, there is no teaching in either of those references to enter the data in a networked fashion. A person of ordinary skill

in the art reading those references, without having had the benefit of first reading the present disclosure, would assume that data are entered into the expert system disclosed in Anderson et al. in a manual manner, or some other conventional manner. No discussion whatsoever of networked entry of data from a large number of multiple sites and sources is disclosed or suggested in either of those references.

Only then-pending claims 1 and 9 were rejected based on the prior art. The other claims were rejected only under §112, second paragraph, however, the Examiner did not state whether the dependent claims were allowable over the prior art of record. Applicants respectfully submit that all claims of the application are in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,

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